

A LAW AND POLITICAL ECONOMY ANALYSIS OF AN INTERNATIONAL CARBON PRICE FLOOR ON AI*

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ABSTRACT

The Artificial Intelligence (“AI”) revolution promises significant economic progress and development, as well as innovative solutions for addressing environmental damage and climate change. However, AI use has resulted in higher carbon emissions. In response to growing scrutiny over AI’s carbon footprint, the International Monetary Fund (“IMF”) has proposed an international carbon price floor (“ICPF”) to put a minimum price on carbon depending on each country’s development level. The ICPF leverages market forces to efficiently ramp up the Nationally Determined Contributions of states under the Paris Agreement and internalizes the social costs of carbon emissions. However, its seemingly straightforward benefits mask entrenched inequities. This Note provides a critical analysis through a law and political economy (“LPE”) framework. It examines the role of market and political structures in shaping the implementation of the proposed climate policy, and how these affect the development and use of AI in smaller companies, in particular, and Global South countries in general. This Note aims to dispel the notion that AI policies relying on market efficiency are neutral and apolitical. Through the LPE lens, this Note argues how climate policy must move beyond the illusion of market efficiency to foster a more inclusive, equitable, and democratic global change.

KEYWORDS: law and political economy, international carbon price floor, artificial intelligence, carbon pricing

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“All that glisters is not gold.”
—Shakespeare¹

I. INTRODUCTION

Artificial intelligence (“AI”) is a double-edged sword. It is lauded as a promising solution to the climate challenges faced by the world today.² However, its development and deployment entail significant energy usage

¹ WILLIAM SHAKESPEARE, *THE MERCHANT OF VENICE* 35 (Cambridge University Press ed., 2009).

² Chunchu Suchith Kumar et al., *Climate Change Mitigation Through AI Solutions, in* GASTRONOMIC SUSTAINABILITY SOLUTIONS FOR COMMUNITY AND TOURISM RESILIENCE 40–51 (2024).

resulting in higher carbon emissions.³ Unfortunately, there is still no mandatory rule or law regulating the environmental impact of AI.⁴ Current movements for AI regulation, in the United Kingdom, for example, focus on establishing ethical, security, transparency and accountability standards for its development and use.⁵ While there are a number of international and national regulatory frameworks that address environmental impacts of AI⁶ calling for environmental sustainability, most of them “often regard it as a voluntary risk management measure.”⁷ Moreover, other present multilateral treaties on climate change only give state parties with targets, commitments, mechanisms, and principles indirectly governing their application in climate action to address the adverse effects of climate change.⁸

With the rising environmental crisis brought by the popularity of AI, calls for addressing such a crisis have emerged.⁹ There are suggestions from the World Trade Organization (WTO),¹⁰ the Organization for Economic Co-operation and Development (OECD),¹¹ and the International Monetary

³ Patrick K. Lin, *The Cost of Teaching a Machine: Lighting the Way for a Climate-Aware Policy Framework That Addresses Artificial Intelligence’s Carbon Footprint Problem*, 34 FORDHAM ENVTL. L. REV. 1, 12 (2022).

⁴ Aaron Appelle & Shirley Garrett, *Will Businesses or Laws and Regulations Ever Prioritise Environmental Sustainability for AI Systems?*, OECD.AI, Aug. 11, 2023, at <https://oecd.ai/en/work/businesses-regulations-environmental-sustainability>.

⁵ *AI regulations around the world: Trends, takeaways & what to watch heading into 2025*, DILIGENT, at <https://www.diligent.com/resources/guides/ai-regulations-around-the-world> (last modified Oct. 4, 2024).

⁶ UNITED NATIONS ENVIRONMENT PROGRAMME, ARTIFICIAL INTELLIGENCE (AI) END-TO-END: THE ENVIRONMENTAL IMPACT OF THE FULL AI LIFE CYCLE NEEDS TO BE COMPREHENSIVELY ASSESSED (2024).

⁷ Appelle & Garrett, *supra* note 4.

⁸ Lucia Bakosova, *Climate Action through Artificial Intelligence: International Legal Perspective*, 10 STUDIA IURIDICA CASSOVIENSIA 3, 13 (2022).

⁹ See, generally, Shafik Hebous & Nate Vernon-Lin, *Carbon Emissions from AI and Crypto Are Surging and Tax Policy Can Help*, IMF BLOG, Aug. 15, 2024, at <https://www.imf.org/en/Blogs/Articles/2024/08/15/carbon-emissions-from-ai-and-crypto-are-surging-and-tax-policy-can-help>; See, generally, Dan Milmo, *Balance Effects of AI with Profits Tax and Green Levy, Says IMF*, THE GUARDIAN, June 17, 2024, at <https://www.theguardian.com/business/article/2024/jun/17/ai-profits-tax-green-levy-imf-carbon-emissions>.

¹⁰ WTO Chief Calls for Global Carbon Price, Reforms to Tariffs and Red Tape to Clean up Supply Chains, WORLD ECON. F., Jan. 20, 2023, at <https://www.weforum.org/press/2023/01/wto-chief-calls-for-global-carbon-price-reforms-to-tariffs-and-red-tape-to-clean-up-supply-chains/>.

¹¹ Chris Giles & Sam Fleming, *OECD Seeks Global Plan for Carbon Prices to Avoid Trade Wars*, FIN. TIMES, Sept. 13, 2021, at <https://www.ft.com/content/334cf17a-e1f1-4837-807a-c4965fe497f3>.

Fund (IMF)¹² for a global carbon price as a solution to climate change. The IMF proposes the imposition of an international carbon price floor (“ICPF”).¹³ This proposal utilizes carbon pricing mechanisms to ramp up the carbon reduction commitments of countries under the Paris Agreement.¹⁴

In this Note, I will explore the application of the IMF’s ICPF proposal as a response to the global call of mitigating the environmental impact of AI technologies. Through a law and political economy (“LPE”) approach, I will examine and critique this proposed ICPF as applied to AI carbon emissions. The LPE framework takes “an interdisciplinary perspective, viewing markets as fields of social power”¹⁵ that are shaped by “legal norms, political action, and economic activity.”¹⁶ It focuses on how legal and political systems influence economic relationships and power dynamics within society.¹⁷ The LPE framework asks who actually wields power in the laws enacted and who benefits from those laws. Thus, through this lens, the question of what it truly means to have liberty and prosperity under the rule of law will be answered.

Through this Note, I will highlight how neoliberal or market-based economic policies in AI development and climate change mitigation prioritize market efficiency and individualism over collective welfare, preventing us from implementing an equitable and democratic environmental policy. I will examine how the ICPF, as a climate change policy, will unfairly and disproportionately burden the parties sought to

¹² See, generally, IAN PARRY, SIMON BLACK & JAMES ROAF, IMF, PROPOSAL FOR AN INTERNATIONAL CARBON PRICE FLOOR AMONG LARGE EMITTERS (2021), at <https://www.imf.org/-/media/files/publications/staff-climate-notes/2021/english/cnea2021001.pdf>; JEAN CHATEAU, FLORENCE JAUMOTTE & GREGOR SCHWERHOFF, IMF, ECONOMIC AND ENVIRONMENTAL BENEFITS FROM INTERNATIONAL COOPERATION ON CLIMATE POLICIES (2022), at <https://www.imf.org/-/media/files/publications/dp/2022/english/eebicpea.pdf>.

¹³ See, generally, PARRY, BLACK, & ROAF, *supra* note 12; CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 1.

¹⁴ *Id.*

¹⁵ Michael A. Wilkinson & Hjalte Lokdam, *Law and Political Economy*, 1 (London Sch. Econ., Law, Society and Econ. Working Paper, 7/2018, 2018).

¹⁶ *Id.*

¹⁷ Sam Aber & Caroline Parker, *Law and Political Economy: A (Very) Brief Field Guide for 1Ls*, LPE PROJECT, Aug. 30, 2021, at <https://lpeproject.org/blog/law-and-political-economy-a-very-brief-field-guide-for-1ls/>.

benefit under this proposed regulation. Particularly, I will center into the discussion the implications of an ICPF on power, equality, and democracy. The focus will be on Global South countries and small startup companies developing and using their own AI technologies.

The implementation of the ICPF could consolidate power among countries and corporations that have the resources to comply with and influence the regulations, potentially marginalizing less developed nations and smaller entities. It may exacerbate inequalities by disproportionately burdening developing nations without providing them with the necessary infrastructure or resources to transition to cleaner energy sources. There is a risk that powerful interests could manipulate the policy-making process to their advantage, undermining democratic principles.

Considering these insights, I will conclude the Note with the claim that the proposed regulation may reinforce rather than subvert climate and economic injustices. Recognizing the hold of neoliberal ideologies in economic and environmental policies, I propose for a shift from neoliberal market-driven policies to nonmarket solutions or redesigned climate policies, which are more equitable and democratic.

The rest of the Note proceeds as follows. Part II discusses the dual role of AI in climate change mitigation while giving context on the current legal gap for a mandatory regulatory framework to address the environmental impact of AI. Part III introduces the IMF's proposal for an ICPF. Under this Part, I will situate how the ICPF, through carbon pricing mechanisms, may be used to address the environmental impact of AI technology, particularly its carbon emissions. Part IV critiques this proposal using the LPE framework and integrates the insights from this critique to formulate proposals for a more equitable and democratic climate policy. Part V concludes.

II. ARTIFICIAL INTELLIGENCE, CLIMATE CHANGE, AND CURRENT REGULATORY ENVIRONMENT

A. Artificial Intelligence for Climate Change Mitigation

Climate change is the most “defining crisis of our time.”¹⁸ While it may be due to natural causes, “human activities have been the main driver of climate change”¹⁹ since the start of the industrial revolution.²⁰ The Intergovernmental Panel on Climate Change (“IPCC”) Working Group reported that human activities have caused greenhouse gas (“GHG”) emissions “responsible for approximately 1.1°C of warming [during] 1850-1900[.]”²¹ The climate crisis has only been further exacerbated with the advent of globalization.²² As countries achieve economic success through globalization by “advancing economic, social, and political development,”²³ carbon dioxide (CO₂) emissions have also increased, resulting in “climatic change and environmental degradation[.]”²⁴ This is primarily due to reliance on using fossil fuels—such as coal, oil, and gas—as the main sources of energy to propel this growth.²⁵

The arrival of globalization has also accelerated the “advancement of information technology and communication (ICT).”²⁶ In this era of innovative ICTs, new technological inventions are discovered to address the

¹⁸ *The Climate Crisis – A Race We Can Win*, UNITED NATIONS, at <https://www.un.org/en/un75/climate-crisis-race-we-can-win> (last visited Oct. 2, 2024).

¹⁹ *Climate Change*, UNITED NATIONS, at <https://www.un.org/en/global-issues/climate-change> (last visited Oct. 10, 2024).

²⁰ *Id.*

²¹ *Climate change widespread, rapid, and intensifying – IPCC*, IPCC, <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/> (last visited Nov 27, 2024);

²² Cheng-Feng Wu et al., *Impact of Globalization on the Environment in Major CO₂-Emitting Countries: Evidence Using Bootstrap ARDL with a Fourier Function*, 10 FRONT PUB. HEALTH 1, 1–2 (2022).

²³ *Id.* at 1.

²⁴ Usman Mehmood & Salman Tariq, *Globalization and CO₂ Emissions Nexus: Evidence from the EKC Hypothesis in South Asian Countries*, 27 ENV'T SCI. POLLUTION RES. 37044, 37044 (2020).

²⁵ Liton Chandra Voumik et al., *CO₂ Emissions from Renewable and Non-Renewable Electricity Generation Sources in the G7 Countries: Static and Dynamic Panel Assessment*, 16 ENERGIES 1044, 1044 (2023).

²⁶ Akshay Bhargava, *AI Acceleration within the Four Corners of Ecological Balance: An Analysis*, 24 SUPREMO AMIC. [440], 1 (2021).

“contemporary and advancing needs of [...] human beings [and] nature.”²⁷ One of these inventions is artificial intelligence.²⁸ As defined by IBM, AI is the “technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy.”²⁹ It is a tool which “offers numerous benefits across various industries and applications.”³⁰

AI does not only hold the promise to revolutionize production processes, productivity, and growth.³¹ It also gives hope in further strengthening the climate mitigation programs of various States and international bodies.³² It is even claimed that addressing climate change is an area where AI has “transformational potential.”³³ It is “a new tool that will help us better manage the impacts of climate change and protect the planet[.]”³⁴ Indeed, 87% of the commercial and governmental sectors agree with this claim as they consider AI as an important instrument in combating climate change.³⁵ In a 2018 survey by Intel and Concentrix, 74% of business-decision makers in environmental sustainability concur that AI will help address environmental issues.³⁶

AI has been used to solve problems that have thus far escaped human ingenuity, such as preserving biodiversity,³⁷ enhancing energy

²⁷ *Id.*

²⁸ *Id.*

²⁹ Cole Stryker & Eda Kavlakoglu, *What Is Artificial Intelligence (AI)?*, IBM, Aug. 9, 2024, at <https://www.ibm.com/think/topics/artificial-intelligence>.

³⁰ *Id.*

³¹ FERNANDA BROLLO ET AL., IMF, BROADENING THE GAINS FROM GENERATIVE AI: THE ROLE OF FISCAL POLICIES 3 (2024).

³² DAVID SANDALOW ET AL., ARTIFICIAL INTELLIGENCE FOR CLIMATE CHANGE MITIGATION ROADMAP 102 (2023), available at https://icef.go.jp/wp-content/themes/icef_new/pdf/roadmap/icef2023_roadmap_AI-Climate.pdf.

³³ Victoria Masterson, *9 Ways AI Is Helping Tackle Climate Change*, WORLD ECON. F., Feb. 12, 2024, at <https://www.weforum.org/agenda/2024/02/ai-combat-climate-change/>.

³⁴ Renée Cho, *Artificial Intelligence—A Game Changer for Climate Change and the Environment*, STATE OF THE PLANET, June 5, 2018, at <https://news.climate.columbia.edu/2018/06/05/artificial-intelligence-climate-environment/>.

³⁵ Kumar et al., *supra* note 2, at 38.

³⁶ Todd Brady, *Applying Emerging Technology to Solve Environmental Challenges*, INTEL NEWSROOM, Dec. 13, 2018, at <https://download.intel.com/newsroom/2021/archive/2018-12-13-editorials-intel-study-applying-emerging-technology-solve-environmental-challenges.pdf>.

³⁷ Roberta Kwok, *AI Empowers Conservation Biology*, 567 NATURE 133, 133 (2019).

usage,³⁸ and tracking calamities for disaster risk management.³⁹ It was used to help scientists track large Antarctic icebergs in satellite images, allowing them to understand and determine the amount of meltwater released into the ocean.⁴⁰ It assisted an environmental group to analyze waste processing and recycling facilities, enabling them to improve the recovery and reuse of waste materials⁴¹ and remove plastic pollution from the ocean.⁴² It was utilized by several United Nations agencies in a project known as the International Climate Initiative to help communities in Burundi, Chad, and Sudan—all vulnerable to climate change—to strengthen climate change adaptation strategies.⁴³

However, AI appears “destined to play a dual role”⁴⁴ in climate change mitigation. Recent scholarship concludes that AI development and usage are associated with significantly higher energy consumption, contributing to the rise of carbon emissions.⁴⁵ This is mainly due to how the

³⁸ Melike Erol-Kantarci, *Smart Grid? Yes, AI Says: Bring It On!*, IEEE COMM'N SOC'Y, Apr. 21, 2021, at <https://www.comsoc.org/publications/ctn/smart-grid-yes-ai-says-bring-it>.

³⁹ Lazima Faiah Bari et al., *Potential Use of Artificial Intelligence (AI) in Disaster Risk and Emergency Health Management: A Critical Appraisal on Environmental Health*, 17 ENV'T HEALTH INSIGHTS 1, 3 (2023).

⁴⁰ *AI maps icebergs 10,000 times faster than humans*, EUR. SPACE AGENCY, Sept. 11, 2023, at https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-1/AI_maps_icebergs_10_000_times_faster_than_humans.

⁴¹ *Unlock the power of AI waste analytics*, GREY PARROT, <https://www.greyparrot.ai> (last visited Dec. 27, 2025).

⁴² Robin de Vries, *Using AI to Monitor Plastic Density in the Ocean*, OCEAN CLEANUP, Jan. 26, 2022, at <https://theoceancleanup.com/updates/using-artificial-intelligence-to-monitor-plastic-density-in-the-ocean/>.

⁴³ Victoria Masterson, *9 ways AI is helping tackle climate change*, WORLD ECON. F., Feb. 12, 2024, at <https://www.weforum.org/stories/2024/02/ai-combat-climate-change>.

⁴⁴ Payal Dhar, *The Carbon Impact of Artificial Intelligence*, 2 NATURE MACH. INTELLIGENCE 423, 423 (2020).

⁴⁵ *Id.*; see OECD, MEASURING THE ENVIRONMENTAL IMPACTS OF ARTIFICIAL INTELLIGENCE COMPUTE AND APPLICATIONS: THE AI FOOTPRINT (2022); see David Patterson et al., *Carbon Emissions and Large Neural Network Training*, ARXIVLABS, Apr. 23, 2021, at <http://arxiv.org/abs/2104.10350>; see Tamara Kneese & Meg Young, *Carbon Emissions in the Tailpipe of Generative AI*, HARV. DATA SCI. REV. (SPECIAL ISSUE) 1, 2 (2024); see Adrien Berthelot et al., *Estimating the Environmental Impact of Generative-AI Services Using an LCA-Based Methodology*, 122 PROCEDIA CIRP 707, 707 (2024); see Noman Bashir et al., *The Climate and Sustainability Implications of Generative AI*, AN MIT EXPLORATION OF GENERATIVE AI, Mar. 27, 2024, at <https://mit-genai.pubpub.org/pub/8ulgrckc/release/2>; see Alokya

AI sector relies heavily on data centers that use carbon-intensive energy sources.⁴⁶ Utilities, power regulators, and even researchers across several countries declared that the rapid growth in power demand due to the popularity of AI is addressed through utilization of fossil fuels “because the pace of clean-energy deployments is moving too slowly to keep up.”⁴⁷ In the United States, which hosts one-third of the world’s data centers, utilities are constructing new gas plants and postponing the decommissioning of fossil-fuel power plants “as a slew of sprawling new data centers plug in to the grid.”⁴⁸ Indubitably, the increasing use and distribution of AI technology will result to rising carbon emissions.⁴⁹

Moreover, AI developers are prioritizing speed and reliability over emissions generation.⁵⁰ According to the Senior Vice President for Product and Business Development of Mythic, an AI semiconductor start-up, hyperscaler companies⁵¹ are “trying to get better and more accurate voice recognition, speech recognition, and recommendation engines.”⁵² With higher accuracy, the more clients these companies can service, and increased chances of generating profits.⁵³ Thus, while companies like “Google and

Kanungo, *The Green Dilemma: Can AI Fulfil Its Potential Without Harming the Environment?*, ENERGY, July 18, 2023, at <https://earth.org/the-green-dilemma-can-ai-fulfil-its-potential-without-harming-the-environment/>.

⁴⁶ Renée Cho, *AI’s Growing Carbon Footprint – State of the Planet*, COLUM. CLIMATE SCH., June 9, 2023, at <https://news.climate.columbia.edu/2023/06/09/ais-growing-carbon-footprint/>.

⁴⁷ Valerie Volcovici & Laila Kearney, *Data-Center Reliance on Fossil Fuels May Delay Clean-Energy Transition*, REUTERS, Nov. 26, 2024, at <https://www.reuters.com/technology/artificial-intelligence/how-ai-cloud-computing-may-delay-transition-clean-energy-2024-11-21/>.

⁴⁸ *Id.*

⁴⁹ Monica de Bolle, *AI’s Carbon Footprint Appears Likely to Be Alarming*, PETERSON INST., Feb. 29, 2024, at <https://www.piie.com/blogs/realtime-economics/2024/ais-carbon-footprint-appears-likely-be-alarming>.

⁵⁰ Erin Faulkner, *Data Center Growth a Boon for Gas Transmission Companies*, ENVERUS, Sept. 11, 2024, at <https://www.enverus.com/blog/data-center-growth-a-boon-for-gas-transmission-companies/>.

⁵¹ Karl Montevirgen, *Hyperscale data centers: Reshaping cloud computing and powering AI*, BRITANNICA MONEY, Dec. 17, 2025, at <https://www.britannica.com/money/hyperscaler-data-centers>. “Hyperscalers are large-scale data centers that provide a wide range of cloud computing and data solutions for businesses that need vast digital infrastructure, processing, and storage.”; Mary Zhang, *Hyperscale Data Centers: Who Are the Hyperscalers?*, DGTI INFRA, Jan. 2, 2024, at <https://dgtlinfra.com/hyperscale-and-hyperscalers/>. “Key hyperscalers include AWS, Microsoft Azure, Google Cloud, Meta Platforms, Apple, and Tiktok.”

⁵² Brian Bailey, *AI Power Consumption Exploding*, SEMICONDUCTOR ENG’G, Aug. 15, 2022, at <https://semiengineering.com/ai-power-consumption-exploding/>.

⁵³ *Id.*

Amazon are [...] investing [...] in machine learning and intelligent automation to pursue [enhanced] energy efficiency”⁵⁴ in their data centers,⁵⁵ they are at the same time, together with Microsoft and Meta, “driving the swift proliferation of electricity-guzzling data centers to expand their artificial intelligence and cloud computing technologies.”⁵⁶

Prioritizing accuracy means even more “massive amounts of data are being fed to train models[.]”⁵⁷ With training sessions “lasting weeks to [...] months,”⁵⁸ the process of reading through these significant amounts of data has required extensive power,⁵⁹ expanding the “carbon footprint of AI and placing an increasing burden on the environment.”⁶⁰ Because of this, both Microsoft and Google have issued statements in their sustainability reports to the effect that increased demand for AI tools present a challenge to their net-zero emission targets.⁶¹ It cannot be helped to observe therefore that “[f]orecasts of increased gas demand can appear at odds with the declarations of the technology companies”⁶² to reduce carbon emissions in their operations.⁶³ This raises concerns of whether these tech companies will actually do something to address this urgent issue exacerbating the climate crisis since the priority now is to cater to the rising demand of more powerful AI technologies.

Furthermore, AI technologies are now integrated into the fossil fuel industry which has “automat[ed] the climate crisis.”⁶⁴ In a comprehensive

⁵⁴ PETER DAUVERGNE, *AI IN THE WILD: SUSTAINABILITY IN THE AGE OF ARTIFICIAL INTELLIGENCE* 5 (2020).

⁵⁵ *Id.*

⁵⁶ Laila Kearney, *Global data center industry to emit 2.5 billion tons of CO2 through 2030, Morgan Stanley says*, REUTERS, Sept. 3, 2024, at <https://www.reuters.com/markets/carbon/global-data-center-industry-emit-25-billion-tons-co2-through-2030-morgan-stanley-2024-09-03/>.

⁵⁷ Lin, *supra* note 3, at 6.

⁵⁸ *Id.* at 10.

⁵⁹ *Id.*

⁶⁰ *Id.* at 6.

⁶¹ Dara Kerr, *AI brings soaring emissions for Google and Microsoft, a major contributor to climate change*, NPR, July 12, 2024, at <https://www.npr.org/2024/07/12/g-s1-9545/ai-brings-soaring-emissions-for-google-and-microsoft-a-major-contributor-to-climate-change>.

⁶² Michael V. Grande, *Data Centers: More Gas Will Be Needed To Feed U.S. Growth*, S&P GLOBAL, Oct. 22, 2024, at <https://www.spglobal.com/ratings/en/research/articles/241022-data-centers-more-gas-will-be-needed-to-feed-u-s-growth-13290987>.

⁶³ *Id.*

⁶⁴ DAUVERGNE, *supra* note 54, at 137.

report, environmental organization Greenpeace provided a thorough discussion of the various ways in which hyperscaler cloud companies have been collaborating with fossil fuel extraction firms.⁶⁵ The report revealed that the three largest cloud companies—Amazon, Microsoft, and Google—are using AI, alongside oil companies, to seek oil and gas deposits worldwide.⁶⁶ Deep learning techniques are being utilized to help oil and gas industries “search for new sources of hydrocarbons”⁶⁷ and “model the most efficient ways to drill new wells and conduct hydraulic fracturing.”⁶⁸ By deploying AI tools to accelerate new oil and gas extraction and infrastructure initiatives and projects, tech companies are jeopardizing climate goals.⁶⁹ AI’s carbon footprint problem is further compounded by the “lack of rulemaking and guidance from policymakers and federal agencies.”⁷⁰

B. Current Artificial Intelligence Regulatory Environment

Presently, there is still “no standardized way of measuring, reporting, or mitigating the environmental impact of AI.”⁷¹ Thus, there is “a critical gap in the current AI regulatory discourse [particularly] on the environmental sustainability of AI and technology[,]”⁷² which is “a topic often overlooked both in the environmental law and in technology regulation[.]”⁷³

As of 2024, the United States still lacks a comprehensive federal law governing AI use and risk mitigation,⁷⁴ but it has introduced initiatives like the proposed Algorithmic Accountability Act.⁷⁵ This Act focuses on ensuring companies are transparent in the algorithms they use to mitigate possible biases or discriminatory effects by requiring them to conduct impact assessments of the AI systems they use and sell.⁷⁶ But the Act does not

⁶⁵ Greenpeace Staff, *Greenpeace Report: Oil in the Cloud - Greenpeace*, GREENPEACE, May 19, 2020, at <https://www.greenpeace.org/usa/oil-in-the-cloud/>.

⁶⁶ *Id.*

⁶⁷ DAUVERGNE, *supra* note 54, at 137.

⁶⁸ *Id.*

⁶⁹ Greenpeace Staff, *supra* note 65.

⁷⁰ Lin, *supra* note 3, at 7.

⁷¹ United Nations Environment Programme, *supra* note 6, at 3.

⁷² Philipp Hacker, *Sustainable AI Regulation*, 61 COMMON MARK. L. REV. 345 (2024).

⁷³ *Id.*

⁷⁴ Sruthi Srinath, *AI Legislation in the US: A 2025 Overview*, SIG, Nov. 28, 2024, at <https://www.softwareimprovementgroup.com/us-ai-legislation-overview/>.

⁷⁵ Algorithmic Accountability Act of 2023, H.R. 5628, 118th Cong. (2023); Algorithmic Accountability Act of 2023, S.2892, 118th Cong. (2023).

⁷⁶ *Id.*

mandate environmental assessments of AI models.⁷⁷ Moreover, the US government, through its National Institute of Standards and Technology, published the voluntary AI Risk Management Framework back in January 2023.⁷⁸ It outlines seven characteristics essential in trustworthy AI, which include “validity and reliability, safety, security and resilience, accountability and transparency, explainability and interpretability, privacy-enhancement, and fairness and bias management.”⁷⁹ This issuance in the United States, however, does not address at all how to regulate AI’s environmental impact. While there is one important proposed bill before the US Congress—the AI Environmental Impacts Act of 2024—which addresses AI’s environmental impact, the bill only established a voluntary reporting system⁸⁰ which may or may not at all be followed by the large AI tech companies.

On the other hand, the Chinese government issued two major AI laws and regulations in 2021 and 2022.⁸¹ The first was the Provisions on the Management of Algorithmic Recommendations in Internet Information Services, which “address[ed] concerns on the use of algorithmic systems in online environments, workplace management, and price-setting and established an algorithm registry for AI systems that could shape public opinion.”⁸² The second law was the Provisions on the Administration of Deep Synthesis Internet Information Services which addressed concerns about various types of AI-generated content, including rules on labeling those that may mislead.⁸³ While these regulations and legal frameworks acknowledge the importance of sustainable development, specific regulatory measures targeting AI’s environmental impact are still absent.

⁷⁷ *Id.*

⁷⁸ NAT’L INST. OF STANDARDS AND TECH., ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK (AIRMF 1.0).

⁷⁹ David Leslie & Antonella Maia Perini, *Future Shock: Generative AI and the International AI Policy and Governance Crisis*, HARV. DATA SCI. REV. (SPECIAL ISSUE) 1, 8 (2024).

⁸⁰ Artificial Intelligence Environmental Impacts Act of 2024, H.R. 7197, 118th Cong. (2024); Artificial Intelligence Environmental Impacts Act of 2024, S.3732, 118th Cong. (2024)

⁸¹ Leslie & Perini, *supra* note 79, at 10.

⁸² *Id.*

⁸³ *Id.*

The European Union (EU) issued the EU AI Act, which pioneered international rules on AI,⁸⁴ and will be legally effective in all EU member states.⁸⁵ It “prioritizes user safety and fundamental rights, ensures transparency of AI systems, and mandates that AI follow strict post-market monitoring rules.”⁸⁶ Likewise, it adopts a risk-based approach and imposes obligations on both users and providers, subject to risk levels.⁸⁷ However, despite its ambitious goal for global regulation, the EU AI Act fails to impose “clear strong environmental regulations” on AI providers or deployers.⁸⁸ Thus, while the EU AI Act is recognized as a significant advancement in AI governance and legislation, there are apprehensions regarding the “lack of strong enforcement mechanisms”⁸⁹ under the law particularly on its environment-related provisions.⁹⁰

In the Global South, while there are still no regulatory frameworks in place for the use of AI technologies, governments are taking steps to establish their national strategies on AI development.⁹¹ Particularly, in the Philippines, two bills are presently pending in their respective committees in the House of Representatives: House Bill No. 13 or the Artificial Intelligence Development and Regulation Act of the Philippines and House Bill No. 57 or An Act Instituting the National Artificial Intelligence Code of the Philippines.⁹² However, these bills are primarily aimed at establishing safe,

⁸⁴ *EU AI Act: first regulation on artificial intelligence*, EUROPEAN PARLIAMENT, Feb. 19, 2025, at <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>.

⁸⁵ Till Contzen & Jan Rudolph, *National Implementation of the EU AI Act across Member States*, DELOITTE, Jan. 13, 2026, at <https://www.deloittelegal.de/dl/en/services/legal/perspectives/nationale-umsetzung-eu-ai-act.html>.

⁸⁶ Weiyue Wu & Shaoshan Liu, *A Comprehensive Review and Systematic Analysis of Artificial Intelligence Regulation Policies*, ARXIV, July 23, 2023, at 2, at <http://arxiv.org/abs/2307.12218>.

⁸⁷ *EU AI Act: first regulation on artificial intelligence*, *supra* note 84.

⁸⁸ Benedetta Brevini, *An eco-political economy of ai to understand the complexities of its environmental costs*, CEPR, Nov. 22, 2024, at <https://cepr.org/voxeu/columns/eco-political-economy-ai-understand-complexities-its-environmental-costs>.

⁸⁹ *Reflections on the first binding regulation on AI globally*, GREEN SOFTWARE FOUND., Oct. 17, 2024, at <https://greensoftware.foundation/articles/the-eu-ai-act-insights-from-the-green-ai-committee>.

⁹⁰ *Id.*

⁹¹ Yen Vu, Edmund Baranda, & Peeraya Thammasujarit, *What's Happening in AI-Related Legislation across Asia? Part 2*, ROUSE, at <https://rouse.com/insights/news/2024/what-s-happening-in-ai-related-legislation-across-asia-part-2>.

⁹² H. No. 13, 20th Cong., 1st Sess. (2025). Artificial Intelligence Development and Regulation Act of the Philippines.; H. No. 57, 20th Cong., 1st Sess. (2025). National Artificial Intelligence Code of the Philippines.

fair, and effective use of AI systems, without any provisions on regulating the environmental impact of the use of such systems.

Against this backdrop of national and regional legislation, there have also been attempts to regulate AI on the international plane. The United Nations and the OECD issued their own AI governance rules. The OECD issued the OECD Principles on AI which advocate for AI that is innovative and trustworthy, promoting human-centric values and inclusive growth.⁹³ It establishes overarching principles and provides a forum wherein Member States can cooperate and share information and good practices.⁹⁴ While environmental sustainability is noted as a general goal by the OECD, it lacks actionable directives. On the other hand, the United Nations Educational Scientific and Cultural Organization (UNESCO) formulated a global ethical framework for AI development and deployment.⁹⁵ Under UNESCO's Recommendation on the Ethics of Artificial Intelligence, AI systems with adverse effects on the environment should not be used.⁹⁶ While it highlights the need for AI to contribute to sustainable development, it stops short of prescribing concrete regulatory mechanisms to mitigate its environmental impact.

As Lucia Bakosova found, there are also several extant international treaties that have aimed to combat climate change and its effects, such as the United Nations Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement.⁹⁷ These treaties do not specifically address AI, but they instead establish “goals, commitments, and principles and mechanisms that indirectly regulate.”⁹⁸ She analogically applied Article 10(1) of the Paris Agreement in relation to the use of AI in combating climate change.⁹⁹ She also noted that this provision “restricts State Parties to use artificial intelligence systems that have or may have adverse impact on

⁹³ OECD, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449, (2025), at <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>.

⁹⁴ *Id.*

⁹⁵ UNESCO, Recommendation on the Ethics of Artificial Intelligence at 1, UNESCO Doc. SHS/BIO/REC-AIETHICS/, (2021), at unesdoc.unesco.org/ark:/48223/pf0000380455.

⁹⁶ *Id.* at 20–21.

⁹⁷ Bakosova, *supra* note 8, at 13.

⁹⁸ *Id.*

⁹⁹ *Id.* at 14.

climate change.”¹⁰⁰ But the wording of the regulation is too ambiguous “which has only limited effect on the use of artificial intelligence systems in climate action.”¹⁰¹ Bakosova further observed that “[m]ost of the commitments in the area of climate change and sustainable development are formulated too general and even legally binding documents do not impose hard obligations on the subjects of international law, and there are no effective sanction mechanisms.”¹⁰²

From the foregoing, even with the current sustainability and environmental impact initiatives for AI governance, there is still no mandatory and standard way to regulate the carbon emissions of AI in a global platform. With the increasing carbon footprint from AI technologies used worldwide, there is a need to find a coordinated and binding regulation to address today’s climate crisis.

III. THE CASE FOR AN INTERNATIONAL CARBON PRICE FLOOR

Scaling up climate mitigation action is urgently needed¹⁰³ especially with the increasing carbon footprint of AI technology. Given the lack of any mandatory regulatory framework—both nationally and internationally—in regulating the environmental impact of AI,¹⁰⁴ it is crucial for states to act to ramp up the carbon reduction commitments of countries under the Paris Agreement. The current Nationally Determined Contributions (“NDCs”) of States for 2030 under the Paris Agreement only cut emissions “by one- to two-thirds [sic] of the emissions reductions needed for emission pathways consistent with 1.5-2°C increases.”¹⁰⁵ Moreover, as the IMF notes, the present and existing policies are insufficient to check projected global emission increases and meet the Paris Agreement’s temperature target.¹⁰⁶ Thus, there is a need to propose policies that can help ramp up commitments for reducing emissions to address the increasing AI carbon emissions.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.* at 15.

¹⁰³ CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 1.

¹⁰⁴ See Part II.B for the discussion.

¹⁰⁵ CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 1.

¹⁰⁶ *Id.*

Since “[g]lobal problems require global solutions[,]”¹⁰⁷ and climate change is a global issue that requires coordinated State action from states and various economic sectors to reduce carbon emissions,¹⁰⁸ international organizations such as the WTO,¹⁰⁹ the OECD,¹¹⁰ and the IMF¹¹¹ have suggested a global carbon price as a solution to this crisis. One of these proposals is the imposition of an ICPF by the IMF.¹¹² The ICPF utilizes carbon pricing mechanisms to ramp up the carbon reduction commitments of countries under the Paris Agreement.¹¹³ This Note will focus on the IMF’s ICPF proposal. Under this Part, I will situate how the ICPF may be used to address the global environmental impact of AI technology, particularly its carbon emissions.

A. The International Monetary Fund’s Proposal

With the urgent need to ramp up climate change mitigation policies and to address concerns on “compatibility of decarbonization with continued robust growth, fairness of international burden sharing, and risks of competitiveness losses”¹¹⁴ and “to avoid the implementation of [border carbon adjustments (“BCAs”)],”¹¹⁵ the IMF proposed an ICPF applied worldwide.¹¹⁶ Under this proposal, the level of the carbon price floor will depend on the development level of each country: high-income countries (“HICs”), middle-income countries (“MICs”) and low-income countries (“LICs”) will introduce carbon price floors of USD 75, USD 50, and USD 25, respectively.¹¹⁷ Each country will implement the “maximum of their carbon price floor and the implicit carbon price required to reach their

¹⁰⁷ TATIANA FALCÃO, A PROPOSITION FOR A MULTILATERAL CARBON TAX TREATY 1 (2019).

¹⁰⁸ Lexi Smith, LPE Primer: The Neoliberal Economics of Climate Change, at 1, (July 22, 2022), at <https://lpeproject.org/wp-content/uploads/2022/07/The-Neoliberal-Economics-of-Climate-Change.pdf>.

¹⁰⁹ WTO Chief Calls for Global Carbon Price, Reforms to Tariffs and Red Tape to Clean up Supply Chains, *supra* note 10.

¹¹⁰ Giles & Fleming, *supra* note 11.

¹¹¹ PARRY, BLACK, & ROAF, *supra* note 12; CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 1.

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ CHATEAU, JAUMOTTE, AND SCHWERHOFF, *supra* note 12, at 1.

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 1–5.

¹¹⁷ *Id.* at 12.

NDC[s].”¹¹⁸ With the minimum carbon price, countries can adjust and set higher prices than the floor price if their respective NDCs under the Paris Agreement cannot be reached based on their corresponding price floor.

According to the IMF, the ICPF reduces emissions sufficiently to accomplish the 2°C target under the Paris Agreement “putting global emissions on a declining trend in a context of robust global growth.”¹¹⁹ Also, it would only have a minimal effect on the global economic growth, as long as countries invest in low-carbon energy.¹²⁰ Because it utilizes a differentiated carbon price floor depending on the income levels of countries,¹²¹ it is claimed that, compared to a uniform global carbon price, this policy would be much fairer. Additional transfer payments between states “proven politically problematic” would likewise be less necessary.¹²²

The IMF notes that since the ICPF only requires floor prices, HICs which have committed to ambitious climate policies in their NDCs “might have to set a higher price to achieve these goals.”¹²³ And since the price floors for MICs and LICs are “higher than those implied by their NDCs which do not go far enough to limit the increase in temperature[.]”¹²⁴ there is a need that these countries strengthen their contributions, “which account for a fast-growing share of global emissions, to keep global temperatures in check.”¹²⁵ In other words, MICs and LICs must increase their NDCs to contribute more to the emissions reduction commitments of the world. “[A] simultaneous and differentiated ICPF”¹²⁶ would also mean that there is “no need for high-income countries to impose a [border carbon adjustment] tariff.”¹²⁷

The IMF therefore proposes the ICPF for states to establish a coordinated carbon pricing mechanism considering each state’s economic development level. But what are carbon pricing mechanisms?

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 13.

¹²⁰ *Id.* at 14–16.

¹²¹ *Id.* at 20–21.

¹²² Jean Chateau, Florence Jaumotte, & Gregor Schwerhoff, *Why Countries Must Cooperate on Carbon Prices*, IMF, May 19, 2022, at <https://www.imf.org/en/Blogs/Articles/2022/05/19/blog-why-countries-must-cooperate-on-carbon-prices>.

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 29–30.

¹²⁷ *Id.*

B. Carbon Pricing Mechanisms

“Climate change is the greatest market failure the world has ever seen[.]”¹²⁸ It is “primarily caused by the burning of fossil fuels and the destruction of forests, which release carbon dioxide, a heat trapping [GHG], into the atmosphere.”¹²⁹ The negative externalities from carbon usage are not reflected in the price of fuels.¹³⁰ Thus, economists have long called for internalizing the social costs of carbon dioxide emissions to reflect the impact on the global climate.¹³¹ A way to do this is through carbon pricing.¹³²

The Paris Agreement “sets in place provisions for enhanced cooperation among nations on climate change mitigation, including through market-based approaches, such as carbon pricing.”¹³³ Particularly, Article 6.2 of the Paris Agreement encourages the use the coordinated use of carbon pricing approaches across nations.¹³⁴ The United Nations defines carbon pricing as a mechanism to curb GHG emissions which involves utilizing emission fees and/or incentivizing less emissions.¹³⁵ By implementing carbon pricing, the relative costs of goods and services change “in accordance with the Polluter Pays Principle.”¹³⁶ In other words, it captures the external costs of emitting carbon and places such cost back to its source.¹³⁷ It may be in the form of “carbon taxes, cap-and-trade, emission

¹²⁸ NICHOLAS STERN, *THE ECONOMICS OF CLIMATE CHANGE: THE STERN REVIEW* (2006), available at http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf.

¹²⁹ William R. Moomaw & Patrick Verkooijen, *The Future of the Paris Climate Agreement: Carbon Pricing as a Pathway to Climate Sustainability States, International Organizations, and Alliances*, 41 *FLETCHER FORUM WORLD AFF.* 69, 70 (2017).

¹³⁰ *Id.*

¹³¹ William D. Nordhaus, *Economic Growth and Climate: The Carbon Dioxide Problem*, 67 *AM. ECON. REV.* 341, 341–46 (1977).

¹³² Moomaw & Verkooijen, *supra* note 129, at 71.

¹³³ *About Carbon Pricing*, UNITED NATIONS CLIMATE CHANGE, available at <https://unfccc.int/about-us/regional-collaboration-centres/the-ciaca/about-carbon-pricing>.

¹³⁴ The Paris Agreement art. 6.2, Dec. 12, 2015, T.I.A.S. No. 16-1104.

¹³⁵ *About carbon pricing*, *supra* note 133.

¹³⁶ Andrea Baranzini et al., *Carbon Pricing in Climate Policy: Seven Reasons, Complementary Instruments, and Political Economy Considerations*, 8 *WIRES CLIMATE CHANGE* 1, 3 (2017).

¹³⁷ *About carbon pricing*, *supra* note 133.

reduction credits, clean energy standards, and fossil fuel subsidy reduction.”¹³⁸

As Jeff Todd argues, carbon pricing gives firms flexibility: “they can pay the tax or trade for permits [...] or [...] lower their GHG emissions”¹³⁹ to avoid additional costs for the tax or permits. Andrea Baranzini et al. support this claim, noting that carbon pricing decentralizes policy since it relies on the market. This gives participants the “flexibility and autonomy of choice, allowing emitters to freely change their behavior to reduce their costs.”¹⁴⁰ Moreover, it is posited that governments can use carbon pricing to provide strong incentives to private firms and individuals to identify and exploit the least costly way to reduce emissions.¹⁴¹ It contributes to the what is called “*dynamic efficiency*” as it stimulates innovation and adoption of technologies emitting less carbon.¹⁴² With the higher cost of using carbon-intensive technologies and activities, it provides a continuous incentive for both consumers and producers to adopt and invest in carbon-efficient technologies.¹⁴³ Aside from encouraging greater acceptance and adoption of low-carbon technologies, it also “indirectly promotes the development of new ones.”¹⁴⁴

On another note, the application of carbon pricing on a global scale has its merits.¹⁴⁵ As opposed to other types of instruments, carbon pricing addresses the different sources of GHG emissions, helping minimize the cost of pollution control.¹⁴⁶ Carbon price signals would align the marginal abatement costs across all polluters, ensuring that a specific level of abatement is achieved at the lowest possible global cost.¹⁴⁷ Moreover, a global carbon price “would ensure that there are no emission leakages or spillovers, that is, increases in carbon dioxide emissions in some countries as a result of emissions reduction in others.”¹⁴⁸ Thus, a global carbon price will

¹³⁸ Joseph E. Aldy & Robert N. Stavins, *The Promise and Problems of Pricing Carbon: Theory and Experience*, J. ENV'T DEV. 152, 153 (2012).

¹³⁹ Jeff Todd, *Carbon Pricing for a Just Transition*, 95 U. COLO. L. REV. 653, 671 (2024).

¹⁴⁰ Baranzini et al., *supra* note 136, at 5.

¹⁴¹ Aldy & Stavins, *supra* note 138, at 153.

¹⁴² Baranzini et al., *supra* note 136, at 4.

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 3–6.

¹⁴⁶ *Id.* at 3.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* at 5.

warrant fair competition in the global economy by preventing carbon leakage.¹⁴⁹

While carbon pricing can be regressive, Todd argues that this is likely overstated.¹⁵⁰ First, firms and consumers can save on costs if carbon pricing displaces redundant command-and-control policies due to the elimination of compliance costs from these regulations.¹⁵¹ It will potentially lower the amount of costs passed on to the ultimate consumers.¹⁵² Secondly, the regressivity of direct costs on electricity and gasoline can be offset “by the neutral distribution of indirect costs.”¹⁵³ Furthermore, if calculations are based on household expenditures or consumption instead of using annual income, it would result to a “lower burden from carbon pricing, both in terms of regressivity and actual cost.”¹⁵⁴ Lastly, some of the costs of carbon pricing are “shifted back to the factors of production, such as owners of natural resources and capital” debunking the common assumption that all costs are passed on to consumers.¹⁵⁵

C. International Carbon Price Floor and Artificial Intelligence Carbon Emissions

From the foregoing discussion, implementing an international carbon price floor might be a possible effective mandatory legal framework to regulate AI carbon emissions. While it may not only be applied in regulating the AI sector *per se*, as it can be imposed in all carbon-intensive industries,¹⁵⁶ an ICPF will be a starting point to establish a standardized way of mitigating the environmental impact of AI. The ICPF can align climate policies and incentives across different jurisdictions.

An international coordinated carbon pricing scheme would ensure that AI developers and users internalize the environmental costs of their operations as AI technology continues to grow, expand, develop, and become integrated into many industries and sectors worldwide. Moreover,

¹⁴⁹ *Id.*

¹⁵⁰ Todd, *supra* note 139, at 687.

¹⁵¹ *Id.* at 688.

¹⁵² *Id.*

¹⁵³ *Id.* at 689.

¹⁵⁴ *Id.* at 689–90.

¹⁵⁵ *Id.* at 691.

¹⁵⁶ CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 12.

data centers, which house the infrastructure needed for training AI models, would also be incentivized to adopt energy-efficient technologies and renewable energy sources to lower carbon emissions. The ICPF would also not impede tech companies in developing AI technology since it will make use of “the market” to correct any market failures causing climate change. It dispenses the need for command-and-control regulations which will only add compliance costs and allowing “inefficient” governments to regulate not just climate policy but AI development. It would also provide a clear and consistent regulatory environment for AI developers. This would reduce uncertainty and allow businesses to plan and invest with confidence, knowing that their efforts to reduce emissions are aligned with international standards.

Thus, by internalizing the environmental costs, incentivizing innovation, and providing a stable regulatory environment, the implementation of the ICPF can ensure that the growth of AI technology contributes to a sustainable and low-carbon future. However, would the ICPF, implemented through carbon pricing measures, be an equitable and democratic policy to regulate the carbon footprint of AI technologies? This question will be answered in the next sections of this article using the LPE framework.

IV. CRITIQUE OF AN INTERNATIONAL CARBON PRICE FLOOR ON ARTIFICIAL INTELLIGENCE CARBON EMISSIONS

A. The Law and Political Economy Framework

Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski, and K. Sabeel Rahman propose a new LPE approach to legal scholarship as a critique to the current framework called by the authors as the “Twentieth-Century Synthesis” (“Synthesis”).¹⁵⁷ The Synthesis heavily relied on neoclassical economics.¹⁵⁸ It argued for market supremacy, claiming that markets are naturally efficient as they facilitate distribution of “entitlements” to their best value in order to maximize wealth or achieve the most efficient outcome.¹⁵⁹ However, the LPE’s founders noted that, while it emphasized

¹⁵⁷ Jedediah Britton-Purdy et al., *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 YALE L. J. 1784 (2019).

¹⁵⁸ *Id.* at 1796–99.

¹⁵⁹ *Id.*

market efficiency and neutrality, it also concealed discussion on power dynamics and fostered skepticism towards democratic politics.¹⁶⁰

Britton-Purdy et al. posit that the “Synthesis has muted problems of distribution and power throughout public and private law[,]”¹⁶¹ resulting to the present legal scholarship wherein the economy has become less of a subject in fields “reconstituted as fundamentally political”¹⁶² (such as constitutional or administrative law) and politics has become less of a topic in disciplines “reconstituted as fundamentally economic”¹⁶³ (such as corporate or property law). In other words, the Synthesis created two major sets of legal subfields. The first “came to be treated as ‘about the economy,’”¹⁶⁴ where scholarship and policy focused on overcoming inefficiencies and prioritizing wealth maximization.¹⁶⁵ The second involves areas “regarded as ‘essentially about’ the liberty and equality of citizens,”¹⁶⁶ which has withdrawn issues about “economic distribution and structural coercion”¹⁶⁷ from the legal discourse.

Furthermore, they contend that under this Synthesis, legal scholarship heavily influenced by law-and-economics theory has contributed to increased global inequality, as many legal institutions reinforce power imbalances that sustain social harm.¹⁶⁸ One relevant example is environmental law. In recent years, the climate crisis has inspired multiple scholarly works and political efforts, both of which were deeply influenced by economic methodologies.¹⁶⁹ These include “meditations on the public-choice challenges to climate action”¹⁷⁰ or the ambitious “proposals to change the cost structure of the economy”¹⁷¹ through measures like carbon taxes or cap-and-trade systems.¹⁷²

¹⁶⁰ *Id.* at 1794–1818.

¹⁶¹ *Id.* at 1791.

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *Id.* at 1806.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 1794–1818.

¹⁶⁹ *Id.* at 1804–05.

¹⁷⁰ *Id.* at 1804.

¹⁷¹ *Id.*

¹⁷² *Id.*

While such scholarship on environmental law is commendable for its goal to constructively reorient the economy, it largely ignored the discussion of the need for significant public investment and infrastructure reform critical for a swift transition to a sustainable economy.¹⁷³ It also ignored fundamental questions of value “in a global reconstruction of the natural world[.]”¹⁷⁴ such as how society should define costs and benefits, and obscured discussions on the necessary political mobilization to tackle these fundamental questions.¹⁷⁵

Lexi Smith also observed that neoliberal solutions to the climate crisis and neoliberal economic analysis pervaded the legal literature.¹⁷⁶ These ideas promoted climate policy that only allow government interventions that protect the market from collective, democratic decisions made by society.¹⁷⁷ These also reduced environmental legal scholarship to debating the efficiency of different pricing policy instruments and ignored questions on “how these instruments move [through] the political process, how they get operationalized in actual programs, and how they influence broader conceptions of government.”¹⁷⁸

By limiting the discussion in what William Boyd calls “instrument choice debate,”¹⁷⁹ it discouraged new groups from forming and participating in solving problems as a community.¹⁸⁰ This narrowly focused debate in environmental academia has caused the public’s ability to engage in deeper political processes and tackle significant challenges, which are important aspects for meaningful democratic governance, to diminish over time.¹⁸¹ By sidelining these fundamental questions and avoiding deeper engagement to solve the root cause of the climate crisis, it also obscured the law’s important role in shaping market, political, and economic power, enabling power disparities that cause further social divide.

¹⁷³ *Id.* at 1804–05.

¹⁷⁴ *Id.* at 1805.

¹⁷⁵ *Id.* at 1804–05.

¹⁷⁶ Smith, *supra* note 108, at 6.

¹⁷⁷ *Id.* at 7.

¹⁷⁸ William Boyd, *The Poverty of Theory: Public Problems, Instrument Choice, and the Climate Emergency*, 46 COLUM. J. ENV’T. L. 399, 469 (2020).

¹⁷⁹ *Id.* at 473.

¹⁸⁰ *Id.*

¹⁸¹ *Id.* at 474.

Law is central to the different crises we are facing today and it will be central in addressing and resolving them.¹⁸² As Britton-Purdy, Kapczynski, and Grewal put it, “[l]aw conditions race and wealth, social reproduction and environmental destruction...and the political order through which we must respond.”¹⁸³ It “shape[s] [...] the relations between politics and the economy at every point, [acting as] the mediating institution that ties together politics and economics.”¹⁸⁴ It influences political institutions.¹⁸⁵ Political institutions determine economic institutions which in turn influence market structure and relations.¹⁸⁶

Thus, contrary to the claim under the Synthesis, “efficiency of markets is not an economic given.”¹⁸⁷ It is a deliberate political choice, which means an “unequal distributive outcomes of markets modeled on the goals of growth and efficiency”¹⁸⁸ are also deliberate and intentional political choices subject to debate, critique, and rejection.¹⁸⁹ In other words, whoever has economic power can influence the creation of law, and whoever has political power can certainly construct the market. And markets create systemic inequalities.

In light of the foregoing, a need for a new framework emerges “to rebalance market concerns against the need for safeguards that promote a broader social good.”¹⁹⁰ One that can bring to light how law and policy distribute power, resources, and wealth.¹⁹¹ One that can shift current dominant analytical approach in legal scholarship from a limited perspective

¹⁸² Jedediah Britton-Purdy, Amy Kapczynski & David Singh Grewal, *Law and Political Economy: Toward a Manifesto*, LPE PROJECT, Nov. 6, 2017, at <https://lpeproject.org/blog/law-and-political-economy-toward-a-manifesto/>.

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ Douglass North, *Institutions*, 5 J. ECON. PERSPECTIVES 97, 97 (1991), available at <https://www.aeaweb.org/articles?id=10.1257%2Fjep.5.1.97>,

¹⁸⁶ Daron Acemoglu & James A. Robinson, *The Rise and Decline of General Laws of Capitalism*, 29 J. ECON. PERSPECTIVES 3, 20 (2015).

¹⁸⁷ Marietta Auer, *Bargaining with Giants and Immortals; Bargaining Power as the Core of Theorizing Inequality Methodological Tensions in Understanding Markets*, 86 L. CONTEMPORARY PROBLEMS 53, 54 (2023).

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ Agnieszka McPeak, *The Gig Is Rigged: How Gig Companies Exploit Private Law to Entrench Power*, 57 U.C. DAVIS L. REV. 2235, 2248 (2023).

¹⁹¹ Britton-Purdy et al., *supra* note 157, at 1818–32; McPeak, *supra* note 190, at 2248.

of market principles to examining how various systems interact to uncover how our legal system shapes society and causes social harm.¹⁹² One which can refine our understanding of real freedom and true prosperity under the rule of law. Hence, the importance of the LPE framework in legal scholarship.

The LPE framework takes “an interdisciplinary perspective, viewing markets as fields of social power”¹⁹³ that are shaped by legal norms, political actions, and economic activities.¹⁹⁴ It focuses on how legal and political systems influence economic relationships and power dynamics within society.¹⁹⁵ It addresses issues on inequality, the interplay between the state and the market, and the impact of “economic integration and globaliz[ation] on democracy and political self-determination.”¹⁹⁶ It “is a critical approach to law that is focused on the way that purportedly neutral legal rules shape economic power, disguise the political and ideological choices behind inequality, and insulate ‘the economy’ from democratic control.”¹⁹⁷

This framework helps analyze who materially benefits from the creation of new laws,¹⁹⁸ prompting us to ask questions like, “[w]hat inequalities are being ignored in the name of making everyone better off?”¹⁹⁹ “[w]hose interests did a given rule serve when it was established?[,] [w]hose has it served since?”²⁰⁰ “[h]ow does this legal rule structure the flow of resources or wealth?”²⁰¹ “[w]hat would justice look like in this scenario?[,] [and] [h]ow could law help us approach it?”²⁰²

The LPE framework probes into the question of who actually wields power in the laws enacted and for whom such laws are beneficial. In this Note, using the LPE lens, I will critique the IMF’s ICPF proposal—a market-based solution—by examining how it is shaped by powerful interests, how it fails to address the underlying structural causes of climate change, and how it perpetuates existing global inequalities. I will examine how an ICPF as a solution to climate change unfairly and disproportionately burdens the

¹⁹² *Id.*

¹⁹³ Wilkinson & Lokdam, *supra* note 15, at 1.

¹⁹⁴ *Id.*; see Britton-Purdy et al., *supra* note 157.

¹⁹⁵ Aber & Parker, *supra* note 17.

¹⁹⁶ Wilkinson & Lokdam, *supra* note 15.

¹⁹⁷ Aber & Parker, *supra* note 17.

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.*

parties sought to benefit under this proposed regulation—particularly in the context of AI development and use. Through this framework, I hope that policies will be made to create a just, sustainable transition that challenges the existing economic and political order, rather than simply layering a market-based solution onto an already unequal system. I hope to leverage the LPE lens to further refine our understanding of what it really means to safeguard liberty and nurture prosperity under the rule of law, especially in this time of technological age and climate crisis.

B. The International Carbon Price Floor through the Law and Political Economy Lens

While the IMF's proposal for an ICPF is a promising solution to curb AI's carbon emissions, given the current economic and political structure of the AI industry, such a policy will only perpetuate existing inequalities and promote regulatory capture. Neoliberal solutions such as the ICPF will only add problems to an already problematic situation absent any major reformations, reorientations in AI production, or climate and environmental policy that directly address the climate crisis. Through the LPE lens, this section centers the discussion on the implications of an ICPF on power, equality, and democracy,²⁰³ particularly on Global South countries and small startup companies developing and using their own AI technologies.

First, the implementation of the ICPF will consolidate the market power of Big Tech—a small group of powerful corporations—and the Global North. This will marginalize less developed nations and smaller entities in AI development. *Second*, the ICPF will widen the AI divide, as the cost of developing AI technology will increase, and perpetuate carbon colonialism by placing more burden on Global South countries despite the differentiated carbon price floor. The ICPF may exacerbate inequalities by disproportionately burdening developing nations without providing them with the necessary infrastructure or resources to transition to cleaner energy sources. *Third*, with concentrated market power and unequal access to AI, representation in AI products will diminish, and Big Tech interest will be prioritized over the collective goal of climate change mitigation. By relying

²⁰³ The authors offered a “set of broad reorientations and questions” in order to center into discussion in legal scholarship power, equality, and democracy. To wit, it proposed a reorientation “from efficiency to power”, “from neutrality to equality”, and “from antipolitics to democracy.” Britton-Purdy et al., *supra* note 157, at 1818–32.

on market-based policies for climate change mitigation, democratic principles may be undermined because Big Tech and the Global North could manipulate the policymaking process to their advantage.

1. Power: The Rule of the Mighty

Using the LPE framework, this section reorients the discussion from viewing the ICPF as an efficient market-based climate policy to examining how it reinforces the political and economic dominance of Big Tech and Global North countries, particularly in AI development and deployment.²⁰⁴ The implementation of an ICPF will consolidate the power of these companies and countries. This will potentially marginalize developing nations and smaller entities which are mostly in the Global South, perpetuating existing inequalities in AI access and development.

As argued by Britton-Purdy, et. al., power manifests in three critical forms: “the *constitutive power* of law to create endowments that shape all voluntary bargains, the *market power* that legal structures enable, and the *political power* that may arise from differential endowments, market power, or ways that legal rules insulate economic power from democratic reordering.”²⁰⁵ An LPE reorientation would therefore require analyzing how law shapes bargaining power,²⁰⁶ addressing market power to ensure fair and equitable market transactions,²⁰⁷ and examining how economic power translates to political power and influence.²⁰⁸ Applying the LPE framework to the ICPF involves analyzing how these power dynamics play out within the global AI production and economy.

The AI landscape is currently dominated by Big Tech, which prioritizes the interests of their stakeholders.²⁰⁹ Big Tech exclusively possesses the resources necessary to develop and train advanced AI models, such as exponential computing power, elite AI talent, and vast data

²⁰⁴ *Id.* at 1820. “[T]his reorientation would inquire into how law creates, reproduces, and protects political-economic power, for whom, and with what results.” (Emphasis removed).

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 1821.

²⁰⁷ *Id.* at 1821–22.

²⁰⁸ *Id.* at 1822.

²⁰⁹ Pieter Verdegem, *Dismantling AI Capitalism: The Commons as an Alternative to the Power Concentration of Big Tech*, 39 AI SOC. 727, 727 (2024); Gabriel Axel Montes & Ben Goertzel, *Distributed, Decentralized, and Democratized Artificial Intelligence*, 141 TECH. FORECASTING SOC. CHANGE 354, 354 (2019).

reserves.²¹⁰ Moreover, as noted by Nick Dryer-Witthford, Atle Mikkola Kjosén, and James Steinhoff, the success of the AI industry depends on expensive hardware necessary to operate AI.²¹¹ Because of the demands involved in training deep ML models, only a small number of firms have the capacity to afford acquiring the needed hardware for AI development.²¹²

Thus, most developers, except for those backed by tech giants, cannot meet the massive sums in training large language models brought about by logistical and technological requirements.²¹³ Consequently, businesses that lack capital to develop their own AI solutions become dependent on AI services provided by these dominant firms,²¹⁴ fostering inequitable conditions with far-reaching consequences for global technological and economic development.

Large technology companies such as Google/Alphabet, Apple, Facebook/Meta, Amazon, and Microsoft, among others, already dominant in the AI field,²¹⁵ will find it easier to absorb the increased costs associated with the carbon price floor due to their vast financial resources and extensive infrastructure.²¹⁶ In contrast, smaller entities and startups, especially those from Global South countries, may struggle to compete under the new financial burdens imposed by this policy. While Part III.B of this Article discusses that carbon pricing is regressive and may be overblown,²¹⁷ since it can be designed in such a way of minimizing its regressivity, its main rationale is still “to raise the costs of goods and services based on their carbon content.”²¹⁸ In other words, while “[t]he impact of a [c]arbon [t]ax or an

²¹⁰ Verdegem, *supra* note 209, at 727.

²¹¹ NICK DYER-WITHEFORD, ATLE MIKKOLA KJØSEN, & JAMES STEINHOFF, *INHUMAN POWER: ARTIFICIAL INTELLIGENCE AND THE FUTURE OF CAPITALISM* 42 (2019).

²¹² *Id.*

²¹³ Lizhi Peng, *Artificial Divides: Global AI Access Disparities and Constructions of New Digital Realities* 25 (2024) (M.A. thesis, University of Washington) (on file with the University of Washington University Libraries).

²¹⁴ Kolleg Postwachstum, *Konferenz: Great Transformation // Keynote: Nick Smicek*, YOUTUBE (Dec. 5, 2019), <https://www.youtube.com/watch?v=Fmi3fq3Q3Bo>; Verdegem, *supra* note 209, at 731–32.

²¹⁵ Verdegem, *supra* note 209, at 732. *See* Table 1 Value* of the world’s leading AI companies.

²¹⁶ *Id.* at 731.

²¹⁷ *See supra* Part III.B.

²¹⁸ Nathalie J. Chalifour, *A Feminist Perspective on Carbon Taxes*, 21 *CANADIAN J. WOMEN & L.* 171, 204 (2010).

[emissions trading system (“ETS”)] in providing a price signal and carbon pollution abatement mechanism might have an impact on the firm directly or indirectly[,] [it] will ultimately be borne by the consumer in a market where there is only limited competition.”²¹⁹

With very concentrated market power wielded by Big Tech in the AI industry, it cannot be helped but conclude that smaller companies will eventually shoulder an ICPF, implemented either through a carbon tax or an ETS. These entities rely on the AI infrastructure and services of Big Tech, enabling the latter to generate more profits and accumulate market share.²²⁰ This, in turn, will lead to the unending cycle of domination and power imbalance in AI development and access.

Furthermore, the economic burden of carbon price floors would disproportionately impact smaller entities and startups, particularly those from less developed nations, especially since the “economic development and overall well-being of many Global South countries”²²¹ depend heavily on existing investments in fossil fuel extractives.²²² Additionally, with high debt levels, many Global South countries are forced to continue relying on fossil fuels.²²³ Their apparent dependence on carbon-intensive energy sources would mean greater burden on the part of these smaller players in the AI industry.

Consequently, with their limited financial resources and less access to cutting-edge infrastructure, they would struggle to remain competitive in the AI industry under the new financial obligations imposed by an ICPF. The increased economic costs will speed up “corporate takeovers of AI

²¹⁹ Jane Andrew, Mary A. Kaidonis & Brian Andrew, *Carbon Tax: Challenging Neoliberal Solutions to Climate Change*, 21 CRITICAL PERSPECTIVES ON ACCT. 611, 613 (2010).

²²⁰ PYMNTS, *Big Tech Makes Money by Spending on AI Infrastructure*, PYMNTS, Nov. 1, 2024, at <https://www.pymnts.com/news/artificial-intelligence/2024/big-tech-makes-money-spending-ai-infrastructure/>.

²²¹ Olabisi Akinkugbe & Adebayo Majekolagbe, *International Investment Law and Climate Justice: The Search for a Just Green Investment Order*, 46 FORDHAM INT'L L.J. 169, 186 (2022).

²²² *Id.*; Dawud Ansari & Franziska Holz, *Between Stranded Assets and Green Transformation: Fossil-Fuel-Producing Developing Countries towards 2055*, 130 WORLD DEV. 1, 12–13 (2020).

²²³ Kaamil Ahmed, *Rich Countries ‘Trap’ Poor Nations into Relying on Fossil Fuels*, THE GUARDIAN, Aug. 21, 2023, at <https://www.theguardian.com/global-development/2023/aug/21/rich-countries-trap-poor-nations-into-relying-on-fossil-fuels>; Tess Woolfenden, *Rising Debt Locks Global South Countries in Fossil Fuel Production*, DEBT JUSTICE, Aug. 21, 2023, at <https://debtjustice.org.uk/press-release/rising-debt-locks-global-south-countries-in-fossil-fuel-production>.

startups and state capture of new AI technologies”²²⁴ monopolizing and further consolidating the power of Big Tech and Global North countries housing these dominant firms.

From the foregoing, AI is not developed in a vacuum but is influenced by broader political and social structures.²²⁵ Building and maintaining AI systems require significant capital and resources.²²⁶ As a result, those with substantial financial and social power, such as big corporations, exercise considerable influence on the direction and purpose of AI development.²²⁷ These companies, through AI systems, centralize power, standardize knowledge, and reinforce existing structures of domination.²²⁸ Ultimately, these systems will continue to be designed to serve the interests of dominant entities.²²⁹

Therefore, the implementation of the ICPF risks deepening structural inequalities if the policy is not designed to account for these power dynamics. Firms with existing market dominance, primarily Big Tech companies in the Global North, are well-positioned to absorb the increased costs associated with the ICPF. This reinforces their control over the AI sector while marginalizing smaller firms and startups, especially those from the Global South, that lack the financial resources to remain competitive under heightened financial burdens. Moreover, since majority of these dominant firms are in the Global North countries, an ICPF will give them more leverage in economic productivity from this technology. This, in turn, may exacerbate AI’s role in reinforcing existing inequalities,²³⁰ perpetuating technological and economic exclusion.

²²⁴ DAUVERGNE, *supra* note 54 at 48.

²²⁵ KATE CRAWFORD, *ATLAS OF AI: POWER, POLITICS, AND THE PLANETARY COSTS OF ARTIFICIAL INTELLIGENCE* 8 (2021).

²²⁶ *Id.*

²²⁷ DYER-WITHEFORD, KJØSEN, & STEINHOFF, *supra* note 211, at 3–4.

²²⁸ Elise Berlinski, Jérémy Morales, & Samuel Sponem, *Artificial Imaginaries: Generative AIs as an Advanced of Capitalism*, 99 *CRITICAL PERSPECTIVES ON ACCT.* 1, 6 (2024).

²²⁹ CRAWFORD, *supra* note 225.

²³⁰ Verdegem, *supra* note 209, at 728; *see* DYER-WITHEFORD, KJØSEN, & STEINHOFF, *supra* note 211; *see* CRAWFORD, *supra* note 225.

2. *Inequality: The Rule of Injustice*

Building on the previous section, this part utilizes the LPE lens to reorient the discussion from the ICPF's claim of neutrality in climate policy to an analysis centered on equality.²³¹ Under a traditional law-and-economy framework as popularized by the Synthesis, a policy like the ICPF that relies on market-based mechanisms for climate mitigation is considered neutral, as it simply allows market forces to guide participants toward an outcome that maximizes overall wealth.²³² However, from an LPE perspective, an ICPF is not neutral. Rather, it entrenches existing inequalities as established earlier²³³ and as will be further discussed in the succeeding paragraphs.

The concentrated market power of Big Tech companies, which are primarily located in the Global North, has already created significant barriers to entry for smaller AI startup companies, especially those coming from the Global South.²³⁴ With the implementation of an ICPF, the cost of fossil fuel-based energy, which is still widely used by data centers in AI development,²³⁵ will rise. This will further increase the cost of AI development and use, making it even more difficult for these smaller entities and lower-income countries to access AI technology.²³⁶ This, in turn, will widen the existing AI divide and economic inequality. Furthermore, with the lack of capacity, resources, and infrastructure to train AI using data from the Global South, AI models may be primarily trained using data from a Western or Global North perspective, leading to social inequality due to possible biased and discriminatory AI results.²³⁷ Lastly, the implementation of an ICPF risks perpetuating carbon colonialism and climate injustice. While it considers the development level of countries, it still imposes a higher burden on the part of Global South countries to comply with the policy.

²³¹ Britton-Purdy et al., *supra* note 157, at 1824.

²³² *Id.* at 1813.

²³³ *See supra* Part IV.B.1.

²³⁴ *Id.*

²³⁵ Cho, *supra* note 46.

²³⁶ *See generally* Adriansyah & Seung Hyun Hong, *Carbon Pricing in ASEAN+3 Economies: Progress and Challenges*, ASEAN+3 MACROECONOMIC RESEARCH OFF. 1, 10 (2022). *See also* Ben Cottier et al., *How much does it cost to train frontier AI models?*, EPOCH AI, June 3, 2024, at <https://epoch.ai/blog/how-much-does-it-cost-to-train-frontier-ai-models>.

²³⁷ GRATIANA FU, TOWARD ETHICAL ARTIFICIAL INTELLIGENCE IN INTERNATIONAL DEVELOPMENT 14–15 (2022), at <https://www.dai.com/uploads/ethical-ai.pdf>.

As observed by Danni Yu, Hannah Rosenfeld, and Abhishek Gupta, AI has the potential to drive economic growth.²³⁸ But it is primarily the Global North that enjoys its social and economic benefits.²³⁹ A key reason for this disparity is the uneven preparedness of nations in adopting AI technologies. In 2022, an Oxford Insights assessment of 181 countries around the world found that regions from the Global South score the lowest in AI readiness.²⁴⁰ While the recent 2024 Oxford Insights report showed a promising outlook as middle-income economies close the AI readiness gap,²⁴¹ most of the countries from the Global South still lag behind in terms of data and infrastructure availability.²⁴² Both reports underscored that governments require a “robust technology sector, adequate data infrastructure, and strategic vision and attention to governance and ethics at the state level”²⁴³ to support AI development.²⁴⁴ Without these elements, disparities in AI adoption will exacerbate global inequality.

From the foregoing, it is clear that one of the key barriers to AI adoption in the Global South is the lack of infrastructure.²⁴⁵ As stressed by Yu, Rosenfeld, and Gupta, AI development and implementation demand reliable internet connectivity, computing power, vast datasets, and skilled and knowledgeable professionals—resources that are scarce in many lower-income nations.²⁴⁶ The cost of training AI models alone can reach millions of dollars, making AI systems “unaffordable for most resource-constrained countries, let alone keeping it running and maintaining it long term.”²⁴⁷

As developed countries take the lead in mastering artificial intelligence technology because of their higher capability to adopt it, which

²³⁸ Danni Yu, Hannah Rosenfeld, & Abhishek Gupta, *The ‘AI Divide’ between the Global North and Global South*, WORLD ECON. F., Jan. 16, 2023, at <https://www.weforum.org/agenda/2023/01/davos23-ai-divide-global-north-global-south/>.

²³⁹ *Id.*

²⁴⁰ *Id.*; ANNYS ROGERSON ET AL., GOVERNMENT AI READINESS INDEX 2022 53–59 (2022).

²⁴¹ PABLO FUENTES NETTEL ET AL., GOVERNMENT AI READINESS INDEX 2024 10–11 (2024).

²⁴² *Id.* at 43–50.

²⁴³ Yu, Rosenfeld, & Gupta, *supra* note 238.

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ *Id.*

²⁴⁷ *Id.*

transforms productivity and efficiency²⁴⁸ in various sectors of their economies, the gap between the rich and the poor widens.²⁴⁹ The increased cost of AI development due to the ICPF will result in a wider gap. Higher costs will limit AI accessibility for resource-constrained countries, consolidating AI's benefits—such as efficiency, productivity, and innovation—within wealthy nations and Big Tech.²⁵⁰ Without targeted interventions, the AI divide will reinforce existing economic and technological inequalities on a global scale.

As Global South countries are forced to rely on foreign technologies because of lack of resources to build AI systems,²⁵¹ additional challenges such as biases in AI models and the lack of tools in local languages also arise.²⁵² The additional burden from an ICPF promotes AI's capability “of mirroring and magnifying biases embedded within the data it processes.”²⁵³ Since AI models are predominantly trained on data from the Global North,²⁵⁴ they risk reinforcing biased outcomes that do not account for the unique perspectives and experiences of minority groups in the Global South. Without adequate resources to develop their own AI models, small AI companies in Global South countries will struggle to create systems that accurately represent their diverse populations. This lack of representation perpetuates a form of digital colonialism, where the perspectives of the Global North dominate AI results.

One article illustrated “how biases in AI-driven knowledge production can reinforce Western science, overlooking diverse sources of expertise and perspectives regarding conservation research and practices,”²⁵⁵ contributing to global conservation injustices which is one possible outcome of using unrepresentative data in training AI models. If AI companies in the

²⁴⁸ Runqing Qiu & Zhanhong Liu, *AI Widens the Gap between the Rich and the Poor*, 152 SHS WEB CONF. 1, 5 (2023).

²⁴⁹ Qiu & Liu, *supra* note 248.

²⁵⁰ DAUVERGNE, *supra* note 54, at 10.

²⁵¹ Postwachstum, *supra* note 214; Verdegem, *supra* note 209, at 731–32; *See generally* Michael Kwet, *Digital Colonialism: US Empire and the New Imperialism in the Global South*, 60 RACE & CLASS 3 (2019).

²⁵² Peng, *supra* note 213, at 13–16.

²⁵³ Nelson Colón Vargas, *Exploiting the Margin: How Capitalism Fuels AI at the Expense of Minoritized Groups*, 5 AI & ETHICS 1871, 1872 (2024).

²⁵⁴ Frankline Kibuacha, *Building Better AI with High-Quality Training Data from Emerging Markets*, GEOPOLL, Jan. 31, 2025, at <https://www.geopoll.com/blog/training-data-emerging-markets/>.

²⁵⁵ Danilo Urzedo et al., *AI Chatbots Contribute to Global Conservation Injustices*, 11 HUMAN. & SOC. SCI. COMMUN 1, 1 (2024).

Global South cannot use their own perspectives, it will further lead to inequalities in the generation of AI content. In this age of digital conservation, “the significance of representation issues becomes increasingly prominent, as Western science dominates the ways of framing AI-driven tools for formulating plans, strategies, and actions.”²⁵⁶ This dynamic underscores how AI can deepen global inequalities,²⁵⁷ reinforcing the digital divide not only in terms of access but also in representation and output relevance.²⁵⁸

The implementation of an ICPF further risks perpetuating carbon colonialism and climate injustice. The Global North, with its historical responsibility for most carbon emissions,²⁵⁹ will have the resources to absorb the additional costs associated with the ICPF.²⁶⁰ In contrast, the Global South, which has contributed far less to global emissions,²⁶¹ will bear a disproportionate burden. As one study found, an ICPF “places additional burdens of emissions reductions fully on developing economies.”²⁶²

Furthermore, the Global South’s dependence on investments in fossil fuel extractives²⁶³ makes it harder for these countries to transition to green energy.²⁶⁴ As compared to Global North countries, “the transition to net-zero emissions [for Global South countries] poses several existential problems: climate crisis, extreme poverty, and access to energy.”²⁶⁵ Global South countries must “engage in substantial transformation of energy systems and economies”²⁶⁶ which would include slowly phasing out fossil fuel production “forgoing vast economic rents that may contribute to

²⁵⁶ *Id.* at 5.

²⁵⁷ Peng, *supra* note 213, at 24.

²⁵⁸ *Id.* at 13–16.

²⁵⁹ Jason Hickel, *Quantifying National Responsibility for Climate Breakdown: An Equality-Based Attribution Approach for Carbon Dioxide Emissions in Excess of the Planetary Boundary*, 4 LANCET PLANET HEALTH e399, e403 (2020).

²⁶⁰ See *supra* Part IV.B.1.

²⁶¹ Akinkugbe & Majekolagbe, *supra* note 221, at 175.

²⁶² Xiaobei He, Fan Zhai, & Jun Ma, *An Analysis of the IMF’s International Carbon Price Floor*, 15 J. GLOBALIZATION & DEV. 95, 109–10 (2024). However, note that under this study only two developing countries—China and India—both from Global South are included in the analysis.

²⁶³ Akinkugbe & Majekolagbe, *supra* note 221, at 186; Ansari & Holz, *supra* note 222, at 12–13.

²⁶⁴ Ansari & Holz, *supra* note 222, at 12.

²⁶⁵ Akinkugbe & Majekolagbe, *supra* note 221, at 187.

²⁶⁶ Ansari & Holz, *supra* note 222, at 12.

poverty eradication and growth.”²⁶⁷ Thus, “the urgency of energy transition — particularly, a transition that does not explicitly consider justice implications, presents an existential dilemma for Global South countries.”²⁶⁸ By ignoring equitable design and implementation, “policy decisions geared towards attracting climate-friendly investment in developing states could lead to a deepening of the inequalities faced in and by these states.”²⁶⁹ Without meaningful support, these transitions could deepen inequalities rather than resolve them.

From the foregoing, while the IMF's proposal of an ICPF aims to address climate change, its implementation may inadvertently exacerbate existing inequalities. Indeed, the ICPF is designed to address the urgent need for carbon reduction. However, it risks entrenching global inequalities by disproportionately burdening smaller entities and developing nations in the Global South.²⁷⁰ Thus, while AI systems' increasing capabilities may exacerbate global inequalities, such may also result to undermining democratic governance.²⁷¹ This “interrelationship between democracy and inequality may trigger a feedback loop,”²⁷² where rising inequality weakens democratic institutions, leading to policies that further entrench disparities.

3. Oppression: The Rule of the Market and Regulatory Capture

Following the discussion above, this section, through the LPE lens, will analyze the implications of the ICPF imposed on AI's carbon emissions on democracy. This is in contrast with the traditional law and economy approach which focuses on efficiency and neutrality characteristics of a market-based solution leading to the depoliticization of economic governance.²⁷³ This section argues that the concentrated market power of Big Tech will encourage regulatory capture, which will further its influence AI development and governance, undermining democratic principles.

The ICPF leverages carbon pricing methods to reduce carbon reduction commitments of countries under the Paris Agreement.²⁷⁴ As

²⁶⁷ *Id.*

²⁶⁸ Akinkugbe & Majekolagbe, *supra* note 221, at 186.

²⁶⁹ *Id.* at 188.

²⁷⁰ DAUVERGNE, *supra* note 54, at 8.

²⁷¹ Stephanie Bell & Anton Korinek, *AI's Economic Peril to Democracy*, 34 J. DEMOCRACY 151, 151 (2023).

²⁷² *Id.* at 154.

²⁷³ Britton-Purdy et al., *supra* note 157, at 1827.

²⁷⁴ CHATEAU, JAUMOTTE, & SCHWERHOFF, *supra* note 12, at 1–2.

previously emphasized, this is primarily driven by the allure of market-based approaches to climate policy, which is argued to be “far superior”²⁷⁵ compared to the traditional command-and-control regulations.²⁷⁶ Not only are they cost-efficient, they are also more democratic.²⁷⁷ It puts back the power to decide pollution levels “into the hands of the citizenry”²⁷⁸ as they decide “the socially optimal level of pollution control [...] while the precise choice of means would be left to the market.”²⁷⁹ This will ensure public participation and democratic governance in environmental policy. However, relying on markets reduces the role of governments to one that only intervenes “to better optimize markets themselves, such as through ‘nudge’-style regulations or measures to improve market efficiency.”²⁸⁰ In other words, governments only “intervene just enough to get the market to function properly, and then [letting] firms sort out the rest.”²⁸¹

Unfortunately, relying on markets and only giving the government the role of a market-corrector is to subscribe to the assumption that markets are neutral and apolitical institutions that provide solutions to the climate crisis. But as established in the prior sections, and as strongly argued by the law-and-political-economy scholars,²⁸² markets are indeed not neutral but are influenced by “legal and political ordering already in place.”²⁸³ Rather than actually promoting democracy by giving market participants the power to decide pollution levels, these market-based approaches empower corporations to influence policymaking and regulation to their advantage.

²⁷⁵ Boyd, *supra* note 178, at 434.

²⁷⁶ *Id.*; See generally Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 STAN. L. REV. 1333 (1984).

²⁷⁷ Boyd, *supra* note 178, at 434.

²⁷⁸ The author here refers only to one kind of carbon pricing mechanism which is the emissions trading scheme. Cass R. Sunstein, *Administrative Substance*, 1991 DUKE L.J. 607, 636 (1991).

²⁷⁹ Boyd, *supra* note 178, at 437–38.

²⁸⁰ Britton-Purdy et al., *supra* note 157, at 1828.

²⁸¹ Jessica F. Green, *Beyond Carbon Pricing: Tax Reform Is Climate Policy*, 12 GLOB. POL’Y 2, 2 (2021).

²⁸² Britton-Purdy et al., *supra* note 157; Auer, *supra* note 187; McPeak, *supra* note 190; see Wilkinson & Lokdam, *supra* note 15; see Angela P. Harris & James J. Varellas, *Law and Political Economy in a Time of Accelerating Crises Introduction*, 1 J.L. & POL. ECON. 1 (2020); see Petros Terzis, *Law and the Political Economy of AI Production*, 31 INT’L J.L. & INFO. TECH. 302 (2023); see David Kennedy, *Law and the Political Economy of the World*, 26 LEIDEN J. INT’L L. 7 (2013); see Jeremy Bearer-Friend et al., *Taxation and Law and Political Economy*, 83 OHIO ST. L.J. 471 (2022).

²⁸³ Wilkinson & Lokdam, *supra* note 15, at 5.

The concentrated market power due to Big Tech’s almost exclusive ownership of the digital infrastructures for AI development has given tech giants the financial resources to back up their lobbying efforts to influence policymaking, particularly AI governance.²⁸⁴ While it is essential to include industry participation in the policymaking process, it may lead to regulatory capture.²⁸⁵ This happens when an introduced policy contravenes the public interest, because of “industry influence exerted on policymakers through particular *mechanisms*.”²⁸⁶ It occurs when “corporate influence leads to regulation that unjustly prioritizes private interests over public ones.”²⁸⁷

Shaleen Khanal, Hongzhou Zhang, and Araz Taeihagh, agreeing with this claim, argued that “Big Tech have amassed tremendous resources[,]”²⁸⁸ giving them the power to influence policymaking.²⁸⁹ Big Tech controls discourse through digital platforms, research funding, and media sources, framing policy debates that prioritize issues that align with their interests.²⁹⁰ Through this influence, they have the power to define the social problems governments and policymakers must address.²⁹¹ This raises the risk of Big Tech advocating for their own profit-oriented interests. Leveraging on their monopolistic ownership of the digital infrastructure²⁹² for cloud computing and AI models, governments have depended on their services which they used to further influence policymaking.²⁹³ As many social institutions now integrate AI-driven tools and methodologies—which shapes what they prioritize, how they assess risks, and how decisions are made²⁹⁴—a self-reinforcing cycle is created wherein corporate-controlled AI systems shape governance while simultaneously benefiting from the very policies they help dictate.²⁹⁵

²⁸⁴ Will Henshall, *There’s an AI Lobbying Frenzy in Washington. Big Tech Is Dominating*, TIME, Apr. 30, 2024, at <https://time.com/6972134/ai-lobbying-tech-policy-surge/>.

²⁸⁵ Kevin Wei et al., *How Do AI Companies “Fine-Tune” Policy? Examining Regulatory Capture in AI Governance*, 7 PROCEEDINGS OF THE SEVENTH AAAI/ACM CONF. ON AI, ETHICS, & SOC’Y 1539, 1539 (2024).

²⁸⁶ *Id.*

²⁸⁷ *Id.*; See generally LIAM WREN-LEWIS, REGULATORY CAPTURE: RISKS AND SOLUTIONS 1 (2011).

²⁸⁸ Shaleen Khanal, Hongzhou Zhang & Araz Taeihagh, *Why and How is the Power of Big Tech Increasing in the Policy Process? The Case of Generative AI*, 44 POL’Y & SOC’Y 52 (2024).

²⁸⁹ *Id.*

²⁹⁰ *Id.* at 54–56.

²⁹¹ *Id.* at 56.

²⁹² *Id.* at 57.

²⁹³ *Id.* at 56–58.

²⁹⁴ CRAWFORD, *supra* note 225, at 20.

²⁹⁵ See generally Wei et al., *supra* note, at 285.

The growing dominance of corporate interest, particularly that of Big Tech's, is also crucial in determining who can successfully transition to a green economy.²⁹⁶ With their influence in crafting policies and regulations, there is a high probability that they will utilize this power to have significant control over environmental decision-making related to AI development and use. While the ICPF provides for a minimum carbon price floor to reduce carbon emissions for each country, these corporations may use their power to lobby before governments, nationally and internationally, for preferential treatment or exemptions once carbon pricing mechanisms, such as a carbon tax or an ETS, will be implemented.²⁹⁷ This undermines democratic principles as the general public's needs and interest are overshadowed by Big Tech's own interest.

Moreover, while developing countries had an important role in the foundation of international environmental law,²⁹⁸ they are still largely excluded in crafting regulations that govern climate finance²⁹⁹ which are essential in supporting their transition to a greener economy. This inequitable circumstance is part of a larger pattern of procedural injustice in international law and global economic structures, as these were historically designed without substantive input from the Global South.³⁰⁰ While Global South countries "have the ability to present alternative viewpoints, they cannot achieve anything without the endorsement of the industrialized North."³⁰¹ Global North countries have higher bargaining power in climate change treaty negotiations than their Global South counterparts, as the former can

²⁹⁶ Akinkugbe & Majekolagbe, *supra* note 221, at 203.

²⁹⁷ See generally CAMILLE SCHYNS, KAT AINGER & BRAM VRANKEN, *THE LOBBYING GHOST IN THE MACHINE* (2023), at <https://corporateeurope.org/sites/default/files/2023-03/The%20Lobbying%20Ghost%20in%20the%20Machine.pdf>. It is illustrated in this report how Big Tech used its power and influence to tone down the regulatory requirements prescribed in the AI Bill.

²⁹⁸ See generally Parvez Hassan, *Role of the South in the Development of International Environmental Law*, 1 CHINESE J. ENVTL. L. 133, 133 (2016), at <https://www.ajne.org/sites/default/files/event/7081/session-materials/3ajs-ts3-1-phassan-role-of-the-developing-countries.pdf>.

²⁹⁹ Akinkugbe & Majekolagbe, *supra* note 221, at 204.

³⁰⁰ Carmen G. Gonzalez, *Climate Justice and Climate Displacement: Evaluating the Emerging Legal and Policy Responses*, 36 WIS. INT'L L.J. 366, 372–73 (2018); RUCHI ANAND, *INTERNATIONAL ENVIRONMENTAL JUSTICE: A NORTH-SOUTH DIMENSION* 132–34 (2004).

³⁰¹ ANAND, *supra* note 300, at 85.

dictate terms in the negotiations and decide when not to cooperate at all, which ultimately allows them to bring other efforts to a standstill.³⁰²

From the foregoing, the current structure of policymaking remains concentrated in the hands of a few, while the majority of the world, particularly developing nations in the Global South, has little say in shaping the rules that govern their future. Thus, the need to dismantle the monopolistic control of Big Tech and Global North in international policymaking.

C. Towards a More Equitable and Democratic Regulation to Safeguard Liberty and Nurture Prosperity

The preceding sections recentered the discussion of the impact of the IMF's ICPF proposal on power, equality, and democracy. While the Synthesis, using the law-and-economy approach, argued for market-based approaches based on market supremacy, wealth maximization, and neutral and apolitical market distribution. The LPE framework exposed how markets are readily influenced and shaped by economic and political power. Applied to the IMF's proposal of an ICPF imposed on AI's carbon emissions, this perspective reveals how the ICPF may further entrench global inequalities rather than resolve them particularly in the context of AI development and use.

This calls for the need to reimagine or reorient a global climate and AI governance that prioritizes inclusivity, equality and equity, and democratic principles to safeguard liberty and nurture prosperity not just in the Global North but also in the Global South, especially in this AI age. Instead of only allowing “nudge”-style government supervision, a stronger state intervention through direct phase-out of fossil fuels, debt cancellation for Global South countries for fossil fuel projects, and tax policy reform by removing tax incentives and subsidies from fossil fuel industries are essential to achieve a more equitable and democratic climate and AI regulation.

Viewing climate change merely “as a market failure, rather than as a problem of societal transformation[,]”³⁰³ limits individuals and private and public institutions from thinking of radical solutions to address the climate change issue. Letting the market correct “the greatest market failure the

³⁰² *Id.*

³⁰³ Green, *supra* note, at 281.

world has ever seen”³⁰⁴ only allows governments to intervene through nudging or market-oriented measures,³⁰⁵ which will reinforce the inequalities caused by climate change. Moreover, by continuously allocating “resources and regulatory capacity into carbon pricing”³⁰⁶ perpetuates the erroneous belief that markets may help solve climate change.³⁰⁷ Market-based approaches, like carbon pricing in general, and the ICPF in particular, “will [only] continue to polarize the issue of climate change in some high-emitting nations, expending valuable political capital on a flawed policy.”³⁰⁸

Rapid decarbonization demands more than market corrections—it requires decisive state intervention.³⁰⁹ Without strong and express intention to phase out fossil fuels and building infrastructure for renewable energy, no international carbon pricing mechanism—no matter how well-designed—will effectively address emissions exacerbated by the growing use of AI technologies. Demand-side efforts alone, like taxing GHG emissions, investing in energy efficiency, and electrification, along with boosting clean energy supply via subsidies, tax credits, direct investments, and loan guarantees, would not be enough to transition away from fossil fuels.³¹⁰

Merely relying on market mechanisms to encourage innovation toward a green transition assumes that fossil fuel producers will voluntarily phase out their operations—an assumption that is neither realistic nor true.³¹¹ Thus, direct state regulation of phasing out the use of fossil fuels³¹² globally is proposed. This means that, in order to meet climate targets, it is crucial to halt the approval of new oil and gas fields and prevent the development or expansion of coal mines.³¹³ The IPCC supports these

³⁰⁴ STERN, *supra* note 128, at viii.

³⁰⁵ Britton-Purdy et al., *supra* note 157, at 1828.

³⁰⁶ Green, *supra* note 281, at 11.

³⁰⁷ *Id.*

³⁰⁸ *Id.*

³⁰⁹ *Id.* at 2.

³¹⁰ MARK PAUL & LINA MOE, AN ECONOMIST’S CASE FOR RESTRICTIVE SUPPLY SIDE POLICIES: TEN POLICIES TO MANAGE THE FOSSIL FUEL TRANSITION 9 (2023), *available at* <https://climateandcommunity.org/research/economists-case-end-fossil-fuels/>.

³¹¹ *Id.* at 6.

³¹² PAUL & MOE, *supra* note 310.

³¹³ INTERNATIONAL ENERGY AGENCY, NET ZERO BY 2050: A ROADMAP FOR THE GLOBAL ENERGY SECTOR 21 (2021), *available at* <https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/>

findings, emphasizing that tackling the climate crisis requires stopping any new fossil fuel infrastructure development.³¹⁴ In the absence of a deliberate plan to phase out fossil fuels, their usage and the associated emissions will persist indefinitely.

The idea of phasing out environmentally harmful substances through international agreements is not novel. The Montreal Protocol on Substances that deplete the Ozone Layer serves as a successful example, which effectively reduced the use of ozone-depleting chemicals through a globally coordinated phase-out.³¹⁵ While it may be too late for us to prevent climate change from happening, we still have time to create adaptation and mitigation solutions to address the most “defining crisis of our time”³¹⁶ by implementing a restrictive supply-side policy on fossil fuels.³¹⁷

Granted, it is difficult for Global South countries to immediately transition to green energy because of their reliance on fossil fuel extractives for economic development,³¹⁸ especially the crushing debt-obligations they need to pay-off.³¹⁹ However, a just transition from fossil fuels would still be possible by gradually removing tax incentives and subsidies given to the fossil fuel industry, especially for those located in Global North countries.³²⁰ By doing so, states can reorient their more equitable and democratic tax policies. Moreover, Global North countries can give debt concessions or cancellations to Global South countries to give the latter the opportunity to redirect these financial payments toward investments in renewable energy. Coupled with these concessions or cancellations and comprehensive tax

NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf; PAUL & MOE, *supra* note 310, at 9.

³¹⁴ See AMJAD ABDULLA ET AL., CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE (2022); PAUL & MOE, *supra* note 310, at 9.

³¹⁵ Anne Lucia Plein, *A Story between Success and Challenge - 20th Anniversary of the Montreal Protocol*, 11 N.Z. J. ENVTL. L. 67, 68 (2007).

³¹⁶ *The Climate Crisis – A Race We Can Win*, *supra* note 18.

³¹⁷ PAUL & MOE, *supra* note 310.

³¹⁸ Ansari & Holz, *supra* note 222, at 12–13.

³¹⁹ Ahmed, *supra* note 223; Woolfenden, *supra* note 223.

³²⁰ Hannah Ritchie, *How Much in Subsidies Do Fossil Fuels Receive?*, OUR WORLD DATA, Jan. 27, 2025, at <https://ourworldindata.org/how-much-subsidies-fossil-fuels>; Alex Irwin-Hunt, *Countries with the Highest Fossil Fuel Subsidies*, FDI INTELLIGENCE, Sept. 20, 2023, at <https://www.fdiintelligence.com/content/5ab7d542-8b9e-5cc3-a61d-f06c1881c622>; see generally Roberta Mann, *Another Day Older and Deeper in Debt: How Tax Incentives Encourage Burning Coal and the Consequences for Global Warming Symposium: The Business of Climate Change: Challenges and Opportunities for Multinational Business Enterprises*, 20 GLOBAL BUS. DEV. L. J. 111 (2007).

policy reforms, a more equitable, sustainable, and democratic climate mitigation strategy is possible.

As argued by Martha McCluskey, tax policy itself can serve as a powerful tool for climate mitigation “by democratizing the market-shaping power of publicly-backed finance.”³²¹ Noting the significant power of private banking over government-backed liquidity, which is money, and how they influence market incentives and outcomes. McCluskey critiqued this financial power for increasing investments of private banks in the fossil fuel industry, locking in infrastructure that hinders energy transition and climate justice.³²² She argued that “[w]ithout strategies that directly disable the revenue-generating capacity of fossil fuel, the industry will further use its near-term power to make energy transition costly and divisive.”³²³ Thus, by designing a tax system that can disable this revenue-generating capacity, strong government intervention is essential to dismantle fossil fuel revenue streams and promote a just energy transition. As one scholar argues, “[t]ax reform [...] is climate policy too.”³²⁴

A just climate transition requires a shift away from neoliberal and market-based mechanisms and toward policies that empower democratic institutions and affected communities. By adopting policies that focus on equitable and democratic governance and state-led intervention, governments can address climate change and at the same time regulate AI’s development and use in a more inclusive, equitable, and democratic manner. This approach ensures that the transition to a low-carbon economy with the adoption of AI technology can benefit all nations, particularly countries from the Global South, including the Philippines, which have been historically marginalized by existing power structures.

Through this reimagined or reoriented approach, it can foster global cooperation in tackling climate change to achieve a more equitable and democratic climate and AI regulation which can help conquer poverty, create wealth, and share prosperity especially in the Global South and for them to

³²¹ Martha T. McCluskey, *Tax Policy for a Climate in Crisis*, LPE PROJECT, May 22, 2023, at <https://lpeproject.org/blog/tax-policy-for-a-climate-in-crisis/>.

³²² *Id.*

³²³ *Id.*

³²⁴ Green, *supra* note 281, at 1.

truly live in freedom from the masked oppression of neoliberal and market-based mechanisms.³²⁵

V. CONCLUSION

In this Note, I have shown the dual role of AI and market-based approaches in climate change mitigation. While AI promises significant economic progress and development, as well as innovative solutions for addressing environmental damage and climate change, it has also contributed to the rapid increase in energy usage resulting in higher carbon emissions. Absent current laws and regulations directly addressing its carbon impact, international institutions turn to carbon pricing policies, a market-based approach, as a possible means to curb the rising emissions. And in this Note, the IMF's proposal for an ICPF was situated to be a possible solution to this urgent climate problem.

While the ICPF appears to be a promising and novel solution to mitigate the carbon emissions at an international level, a deeper analysis using the LPE framework reveals that it risks reinforcing and perpetuating the very inequalities it purports to address. By recentering power, equality, and democracy in the discussion, I have shown that market-based approaches, like carbon pricing, often overlook the structural economic and political disparities between the Global North and the Global South, as well as between large corporations and smaller enterprises, especially in the context of AI development and use.

Because of the dominance of Big Tech in AI development, the implementation of the ICPF can entrench power imbalances, perpetuate AI divide—both in access to technology and equal representation—in AI outcomes, exacerbate carbon colonialism, and weaken democratic institutions and principles. Implementing a global carbon pricing mechanism without addressing these underlying inequities would further risk consolidating power among wealthier nations and corporations, marginalizing less-developed countries and smaller AI companies. This reinforces systemic injustices through economic exclusion and technological dependence. Thus, there arises a need to fundamentally reorient how policies addressing the climate crisis should be crafted, especially now that it has

³²⁵ See generally Unleashing Entrepreneurial Ingenuity, THE PERSONAL WEBSITE RETIRED CHIEF JUSTICE PANGANIBAN, Feb. 26, 2015, at <https://cjpanganiban.com/unleashing-entrepreneurial-ingenuity/>.

become more urgent with the rising popularity of AI which brought forth the accompanying surging carbon emissions.

Consequently, a just, equitable, and democratic climate transition requires moving beyond market-based solutions. In this Note, policies with strong state intervention to eliminate fossil fuels, to cancel surging fossil fuel-backed debts, and to implement equitable tax reforms are suggested to achieve this transition. International cooperation must emphasize fairness and accountability, making those most responsible for climate change share the burden, while providing those vulnerable with support for a green transition. A more democratic and equitable international regulatory framework addressing the climate crisis and AI governance therefore is one that redistributes power, addresses global inequalities, and ensures that technological advancements like AI serve the collective good rather than entrenching existing inequalities. It also means freedom from structural domination and having equitable access to opportunity and environmental sustainability.

This Note began by recognizing the potential of AI technologies in helping address the climate crisis. However, it also revealed AI's dual role in the climate crisis—serving both as a tool for climate change mitigation and a significant contributor to rising carbon emissions. While the IMF's proposed ICPF was initially presented as a promising solution to this dilemma, the LPE framework exposes how such a policy could worsen existing global inequalities, deepen power imbalances, and undermine democratic principles.

In the end, this analysis underscores a critical lesson: Not everything that appears to be a solution truly serves the greater good. Indeed, “[a]ll that glisters is not gold.”³²⁶ Ultimately, a just climate policy must move beyond the illusion of market efficiency to foster a more inclusive, equitable and democratic global change.

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³²⁶ SHAKESPEARE, *supra* note 1, at 35.